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      2
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         OCT 23
                 has been enhanced and reloaded
NEWS
      4
         OCT 30
                 CHEMLIST enhanced with new search and display field
NEWS
      5
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
         NOV 10
NEWS
      6
                 CA/CAplus F-Term thesaurus enhanced
NEWS
      7
         NOV 10
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         NOV 20
                 CAS Registry Number crossover limit increased to 300,000 in
                 additional databases
NEWS
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                 to 50,000
NEWS 10
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
         DEC 11
NEWS 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 12
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 13
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
NEWS 14
         DEC 18
                 CA/CAplus pre-1967 chemical substance index entries enhanced
                 with preparation role
NEWS 15
         DEC 18
                 CA/CAplus patent kind codes updated
NEWS 16
         DEC 18
                 MARPAT to CA/CAplus accession number crossover limit increased
                 to 50,000
NEWS 17
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
NEWS 18
         DEC 27
                 CA/CAplus enhanced with more pre-1907 records
NEWS 19
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS EXPRESS
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
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              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
NEWS X25
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FULL ESTIMATED COST

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http://www.cas.org/ONLINE/UG/regprops.html

=> s S-[2,3-bis(acyloxy)-(2S)-propyl]L-cysteinylcarboxypolyethyleneglycol MISSING OPERATOR 'S-[2,3-BIS(ACYLOXY'

=> s S-[2,3-bis(acyloxy)-(2S)-propyl]
MISSING OPERATOR 'S-[2,3-BIS(ACYLOXY'.

=> s bisacyloxypropylcysteine

0 BISACYLOXYPROPYLCYSTEINE

L1

0 BISACYLOXYPROPYLCYSTEINE

=> file hcaplus COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
5.85 6.06

FULL ESTIMATED COST

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FILE LAST UPDATED: 8 Jan 2007 (20070108/ED)

ECLA

IPCI

CA 2489010

A61K047/48H4P

A61K0047-48 [ICM, 7]

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s bisacyloxypropylcysteine
               1 BISACYLOXYPROPYLCYSTEINE
               1 BISACYLOXYPROPYLCYSTEINES
L2
               1 BISACYLOXYPROPYLCYSTEINE
                     (BISACYLOXYPROPYLCYSTEINE OR BISACYLOXYPROPYLCYSTEINES)
=> d all
      ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
L2
AN
      2004:55397 HCAPLUS
DN
      140:105268
ED
      Entered STN: 22 Jan 2004
      Macrophage-stimulating bisacyloxypropylcysteine conjugates and
      therapeutic use thereof
IN
      Muehlradt, Peter F.; Morr, Michael
PA
      GBF Gesellschaft fuer Biotechnologische Forschung MbH, Germany
SO
      Eur. Pat. Appl., 13 pp.
      CODEN: EPXXDW
DT
      Patent
LΑ
      German
IC
      ICM A61K047-48
      1-7 (Pharmacology)
      Section cross-reference(s): 34
FAN.CNT 1
                                                   APPLICATION NO.
      PATENT NO.
                              KIND
                                      DATE
                                                                                DATE
                                      -----
                                                     -----
                                                   EP 2002-16066 .
                                      20040121
PΤ
      EP 1382352
                              A1
                                                                                 20020719
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
      CA 2489010
                              A1
                                      20040129
                                                  CA 2003-2489010
                                                                                 20030718
      WO 2004009125
                              A2
                                      20040129
                                                    WO 2003-EP7892
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      WO 2004009125
                                      20040527
                              A3
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               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
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                                                   AU 2003-251002
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                              A1
                                      20040209
                                                                                 20030718
                                                   EP 2003-765055
      EP 1521600
                              A2
                                      20050413
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                                                    US 2005-521013
      US 2006134061
                               A1
                                      20060622
                                                                                 20050913
PRAI EP 2002-16066
                               Α
                                      20020719
      WO 2003-EP7892
                               W
                                      20030718
CLASS
 PATENT NO.
                    CLASS PATENT FAMILY CLASSIFICATION CODES
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                            EP 1382352
                    ICM
                            A61K047-48
                    IPCI
                            A61K0047-48 [ICM, 7]
                            A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                    IPCR
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IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
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 WO 2004009125
                        A61K0047-48 [ICM, 7]
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCR
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                        A61K047/48H4P
 AU 2003251002
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                 IPCR
                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCI
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 EP 1521600
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                        A61K0047-48 [I,C*]; A61K0047-48 [I,A]
                 IPCI
                        A61K0038-17 [I,A]; A61K0031-737 [I,A]; A61K0038-16
 US 2006134061
                        [I,A]; C07K0014-47 [I,A]; C07K0014-435 [I,C*]
                        424/078.270; 514/002.000; 514/054.000; 525/054.100;
                 NCL
                        530/409.000; 536/053.000
                        A61K047/48H4P
                 ECLA
OS
    MARPAT 140:105268
    The invention discloses bisacyloxypropylcysteine conjugates
AB
    R2C(0)OCH[R1C(0)OCH2]CH2SCH(NH2)C(0)YR3 (R1, R2 = fatty acid group; Y =
    NH, O, S, OCO; R3 = conjugate group, especially a polymer). Conjugates of the
     invention include e.g. S-[2,3-bis(palmitoyloxy)-(2S)-propyl]-L-cysteinyl-
     carboxy-polyethylene glycol. The conjugates of the invention show good
    macrophage-stimulating activity and need no other solubilizers. They are
    useful for numerous applications, particularly for macrophage stimulation,
     stimulation of antibody production, as a defense against infection, as
     immunostimulants, particularly in relation to tumors, for the prevention
     and treatment of septic shock, for wound healing, and as adjuvants for
     vaccines.
ST
    bisacyloxypropylcysteine polymer conjugate macrophage
     stimulation; immunostimulant antiinfective antitumor
    bisacyloxypropylcysteine polymer conjugate; wound healing vaccine
     adjuvant bisacyloxypropylcysteine polymer conjugate; septic
     shock treatment bisacyloxypropylcysteine polymer conjugate; PEG
    bisacyloxypropylcysteine conjugate prepn macrophage stimulation
IT
     Vaccines
        (adjuvants for; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
     Immunostimulants
        (adjuvants; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
TТ
     Collagens, biological studies
     Polyoxyalkylenes, biological studies
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates with bisacyloxypropylcysteines;
        macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     Polymers, biological studies
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates, with bisacyloxypropylcysteines;
        macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
    Drug delivery systems
        (inhalants; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Drug delivery systems
        (injections; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
ΙT
    Anti-infective agents
     Antitumor agents
    Drug delivery systems
     Immunostimulants
     Infection
    Neoplasm
     Wound
     Wound healing promoters
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```
(macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
    Drug delivery systems
        (nasal; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Antibodies and Immunoglobulins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (production; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
ΙT
     Shock (circulatory collapse)
        (septic; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Macrophage
        (stimulation; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Drug delivery systems
        (topical; macrophage-stimulating bisacyloxypropylcysteine
        conjugates and therapeutic use)
IT
    Glycoconjugates
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (with bisacyloxypropylcysteines; macrophage-stimulating
        bisacyloxypropylcysteine conjugates and therapeutic use)
IT
     647013-57-8
     RL: PAC (Pharmacological activity); BIOL (Biological study)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     647013-56-7P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
     52-90-4D, Cysteine, bisacyloxypropyl derivs., conjugates
IT
     Pectin, conjugates with bisacyloxypropylcysteines
     conjugates with bisacyloxypropylcysteines
                                                 9003-39-8D,
     Polyvinylpyrrolidone, conjugates with bisacyloxypropylcysteines
     9004-54-0D, Dextran, conjugates with bisacyloxypropylcysteines
     9005-32-7D, Alginic acid, conjugates with bisacyloxypropylcysteines**
           25322-68-3D, Polyethylene glycol, conjugates with
     ***bisacyloxypropylcysteines
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
IT
     24991-53-5
                  210532-98-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (macrophage-stimulating bisacyloxypropylcysteine conjugates
        and therapeutic use)
RE.CNT
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD .
RE
(1) Anon; Handbook of pharmaceutical excipients
(2) Cox, G; WO 0042175 A 2000 HCAPLUS
(3) La Roche, H; EP 0510356 A 1992 HCAPLUS
(4) Takeda Chemical Industries Ltd; EP 0604945 A 1994 HCAPLUS
(5) Takeda Chemical Industries Ltd; EP 0604957 A 1994 HCAPLUS
(6) Takeda Chemical Industries Ltd; EP 0638588 A 1995 HCAPLUS
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SET SMA OFF

SET COMMAND COMPLETED

SEL RAN. HCAPLUS (4) L2 1

E1 THROUGH E1 ASSIGNED

=> SET SMA LOGIN

SET COMMAND COMPLETED

=> S E1

L3 1 "1995:546556"/AN

=> D L3 BIB,ABS

```
L3
     ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
     1995:546556 HCAPLUS
AN
DN
     123:144635
     isolation of TAN-1511 compounds and preparation of some specific analogs
TI.
     as immunostimulants
     Tanida, Seiichi; Hida, Tsuneaki; Wakimasu, Mitsuhiro
IN
     Takeda Chemical Industries, Ltd., Japan
PA
     Eur. Pat. Appl., 66 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     English
FAN.CNT 3
```

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 604945	A1	19940706	EP 1993-120952	19931227
	R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI, LU,	NL, PT, SE
	ZA 9309691	A	19950627	ZA 1993-9691	19931227
	JP 07145084	A	19950606	JP 1993-336883 [°]	19931228
	US 5478809	Α	19951226	US 1993-174365	19931228
	CA 2112522	A1	19940629	CA 1993-2112522	19931229
PRAI	JP 1992-349062	A	19921228	•	
	JP 1993-197579	A	19930809		
os	MARPAT 123:144635				
GI					

$$\begin{array}{c} \text{OR}^2 \\ \text{H}_2\text{C}-\text{S}-\text{CH}_2\text{CHCH}_2\text{OR}^1 \\ \\ | \\ \text{R}^3\text{NHCHCO} + \text{Gly} + \text{X}-\text{OH} \\ \end{array}$$

TAN-1511A, TAN-1511B, and TAN-1511C of formula I (no more information regarding specific individual structures given) having leukocyte-enhancing activity, were isolated from Streptosporangium. Moreover, specific analogs of TAN-1511 compds. [I; R1, R2, R3 = aliphatic acyl; X = amino acid sequence containing 1-5 amino acid residues which contains at least one acidic amino acid residue; n = 0-4 integer; provided that when n = 0, X = glutamylglycyl at its N-terminal and when n = 1 or 2, the acidic amino acid residue is an acidic amino acid residue other than D-glutamyl or a salt thereof], having leukocyte-enhancing activity, are prepared Thus, Pam-Dhc(Pam)2-Gly-Gly-Gly-Glu(OtBu)-Thr(tBu)-OtBu [Pam = n-hexadecanoyl, Dhc(Pam)2 = S-2,3-bis(hexadecanoyloxy)-(2S)-propyl-(R)-cysteine residue] (prepared via peptide coupling of Z-Gly-Gly-Gly-Glu(OtBu)-Thr(tBu)-Thr(tBu)-Otbu with Pam-Dhc(Pam)2-OH), was maintained at 20° for 1.5 h to give the title compound Pam-Dhc(Pam)2-Gly-Gly-Gly-Gly-

Glu-Thr-Thr-OH. The title compound (2R,6R)-2-Myr-amino-6,7-bis(PamO)-4-THT-Gly-Gly-Gly-Glu-Thr-Thr-OH [Myr = n-tetradecanoyl, THT = thiaheptanoyl] (also prepared) at 0.13 mg/Kg/day p.o. increased leukocyte number by 7% in a testing using female mice. Pharmaceutical compns. containing I are described.

10521013

INVENTOR SEARCH

CORPORATE SOURCE:

PUBLISHER:

=> d ibib abs ind hitstr 15 1-3

ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:3257 HCAPLUS Full-text

DOCUMENT NUMBER: 138:88605

TITLE:

Differential recognition of structural details of

bacterial lipopeptides by toll-like receptors

AUTHOR (S): Morr, Michael; Takeuchi, Osamu; Akira,

Shizuo; Simon, Markus M.; Muhlradt, Peter F. Research Group Molecular Recognition of the

Gesellschaft fur Biotechnologische Forschung,

Braunschweig, Germany

SOURCE: European Journal of Immunology (2002), 32(12),

3337-3347

CODEN: EJIMAF; ISSN: 0014-2980 Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal LANGUAGE: English

The question which detailed structures of bacterial modulins determine their relative biol. activity and resp. host cell receptors was examined with synthetic variants of mycoplasmal lipopeptides as model compds., as well as recombinant outer surface protein A (OspA) of Borrelia burgdorferi and lipoteichoic acid. Mouse fibroblasts bearing genetic deletions of various toll-like receptors (TLR) were the indicator cells to study receptor requirements, primary macrophages served to measure dose response. following results were obtained: (i) the TLR system discriminates between modulins with three and those with two long-chain fatty acids in their lipid . moiety, in that lipopeptides with three fatty acids were recognized by TLR2, whereas those with two long-chain fatty acids and lipoteichoic acid required the addnl. cooperation with TLR6; (ii) substitution of the free N terminus of mycoplasmal lipopeptides with an acetyl or palmitoyl group decreased the specific activity; (iii) removal of one or both ester-bound fatty acids lowered the specific activity by five orders of magnitude or deleted biol. activity; (iv) oxidation of the thioether group lowered the specific activity by at least four orders of magnitude. The implications of these findings for physiol. inactivation of lipopeptides and host-bacteria interactions in general are discussed.

CC 15-10 (Immunochemistry)

ST lipoteichoic acid bacteria lipopeptide toll like receptor

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (TLR (Toll-like receptor); recognition of bacterial lipopeptides by toll-like receptors)

IT Infection

> (bacterial; recognition of bacterial lipopeptides by toll-like receptors)

IT Fatty acids, biological studies

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (long-chain; recognition of bacterial lipopeptides by toll-like receptors)

ITProteins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (ospA (outer surface protein A); recognition of bacterial lipopeptides by toll-like receptors)

IT Borrelia burgdorferi Macrophage

Structure-activity relationship

(recognition of bacterial lipopeptides by toll-like receptors)

IT Thioethers

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

IT 9041-38-7D, Teichoic acid, lipo- 219986-24-0 250718-44-6 , MALP 2 484648-56-8 484648-57-9

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

IT 219986-24-0 250718-44-6, MALP 2 484648-56-8

RL: BSU (Biological study, unclassified); BIOL (Biological study) (recognition of bacterial lipopeptides by toll-like receptors)

RN 219986-24-0 HCAPLUS

CN L-Threonine, S-[2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-glutaminyl-L-threonyl-L-asparaginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 250718-44-6 HCAPLUS

CN L-Lysine, S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-Lasparaginyl-L-asparaginyl-L-α-aspartyl-L-α-glutamyl-L-seryl-Lasparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L-α-glutamyl(9CI) (CA INDEX NAME)

PAGE 1-A.

H2N

$$(CH_2)_4$$
 H_2
 H_2
 H_3
 H_4
 H_4
 H_5
 H_5
 H_6
 H_6
 H_7
 H_8
 H_8

PAGE 1-B

PAGE 1-C

RN 484648-56-8 HCAPLUS

CN L-Lysine, N-acetyl-S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-asparaginyl-L-asparaginyl-L- α -aspartyl-L- α -glutamyl-L-seryl-L-asparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L- α -glutamyl- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

- (CH₂) 14

REFERENCE COUNT:

40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: ' 2002:829325 HCAPLUS Full-text

DOCUMENT NUMBER:

139.5262

TITLE:

The Mycoplasma-derived lipopeptide MALP-2 is a potent

mucosal adjuvant

AUTHOR (S):

Rharbaoui, Faiza; Drabner, Birgit; Borsutzky, Stefan;

Winckler, Urte; Morr, Michael; Ensoli,

Barbara; Muhlradt, Peter F.; Guzman, Carlos

Α.

CORPORATE SOURCE:

Vaccine Research Group, Division of Microbiology,

GBF-German Research Center for Biotechnology,

Braunschweig, D-38124, Germany

SOURCE: European Journal of Immunology (2002), 32(10),

2857-2865

CODEN: EJIMAF; ISSN: 0014-2980 Wiley-VCH Verlag GmbH & Co. KGaA

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE: English

The adjuvanticity of MALP-2, a 2-kDa synthetic lipopeptide with macrophagestimulatory activity, was evaluated in BALB/c mice using β -galactosidase (β gal) as model antigen. When co-administered with β -gal by either the intranasal (i.n.) or i.p. route, MALP-2 (0.5 μ g) was capable of increasing β gal-specific serum IgG titers by 675-3560-fold (i.n.) and 64-128-fold (i.p.), resp., as compared to immunization with β -gal alone. Using MALP-2, almost maximal IgG responses were already stimulated following the first immunization, and the IgG titers were similar to those observed using 10 μ g of cholera toxin B subunit (CTB) as adjuvant. The mucosal immune system was also effectively stimulated when MALP-2 was administered by the i.n. route (36% and 23% of β -gal-specific IgA in lung and vaginal lavages, resp.). The i.n. coadministration of MALP-2 stimulated a stronger cellular immune response than CTB, both in submandibular lymph nodes and spleen. The anal. of β -galspecific IgG isotypes and the profiles of cytokines secreted by in vitro restimulated cells showed that co-administration of MALP-2 triggered a dominant Th2-response pattern. A recruitment of B220+ and MAC-1+ cells with an upregulated expression of MHC class I, CD80 (B7.1) and CD54 (ICAM-1) was observed in nasal associated lymphoid tissues from MALP-2 treated mice. Taken together, the results demonstrated that the synthetic lipopeptide MALP-2 represents a very promising adjuvant for the mucosal delivery of vaccine antigens.

CC 15-2 (Immunochemistry)

ST Mycoplasma lipopeptide MALP2 adjuvant mucosal immunity

IT CD antigens

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (CD54; up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Histocompatibility antigens

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (H-2, class I; up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Cell adhesion molecules

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-1 (intercellular adhesion mol. 1); up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgA; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG1; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG2a; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2)

IT Antibodies and Immunoglobulins

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG2b; mucosal adjuvant activity of synthetic Mycoplasma-derived

lipopeptide MALP-2) IT Antibodies and Immunoglobulins RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgG3; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) IT T cell (lymphocyte) (helper cell/inducer, TH2; synthetic Mycoplasma-derived lipopeptide MALP-2 enhances immune response by) IT Interleukin 10 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal expression in response to synthetic Mycoplasma-derived lipopeptide MALP-2) IT Immunization (mucosal; adjuvant activity of synthetic Mycoplasma-derived lipopeptide IT Macrophage Monocyte (stimulation in mucosal lymphoid tissue by synthetic Mycoplasma-derived lipopeptide MALP-2) IT Lung Vagina (synthetic Mycoplasma-derived lipopeptide MALP-2 enhances IgA response IT Vaccines (synthetic; mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2 in relation to) IT CD80 (antigen) RL: BSU (Biological study, unclassified); BIOL (Biological study) (up-regulation on monocytes/macrophages by synthetic Mycoplasma-derived lipopeptide MALP-2) IT 250718-44-6, MALP-2 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) TT 250718-44-6, MALP-2 RL: BSU (Biological study, unclassified); BIOL (Biological study) (mucosal adjuvant activity of synthetic Mycoplasma-derived lipopeptide MALP-2) 250718-44-6 HCAPLUS RN L-Lysine, S-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl]-L-cysteinylglycyl-L-CN $asparaginyl-L-asparaginyl-L-\alpha-aspartyl-L-\alpha-glutamyl-L-seryl-L-\\$ $asparaginyl-L-isoleucyl-L-seryl-L-phenylalanyl-L-lysyl-L-\alpha-glutamyl-\\$

Absolute stereochemistry.

(9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 1-C

— (CH₂) 14

REFERENCE COUNT:

29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:557379 HCAPLUS Full-text

DOCUMENT NUMBER:

135:256104

TITLE:

Discrimination of bacterial lipoproteins by Toll-like

receptor 6

AUTHOR(S):

Takeuchi, Osamu; Kawai, Taro; Muhlradt, Peter

F.; Morr, Michael; Radolf, Justin D.;

Zychlinsky, Arturo; Takeda, Kiyoshi; Akira, Shizuo

CORPORATE SOURCE:

Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, and Core

Research for Evolutional Science and Technology (CREST) of Japan Science and Technology Corp., Suita, 565-0871, Japan International Immunology (2001), 13(7), 933-940 CODEN: INIMEN; ISSN: 0953-8178 Oxford University Press Journal English Bacterial lipoproteins (BLP) trigger immune responses via Toll-like receptor 2 (TLR2) and their immunostimulatory properties are attributed to the presence of a lipoylated N-terminus. Most BLP are triacylated at the N-terminus cysteine residue, but mycoplasmal macrophage-activating lipopeptide-2 kDa (MALP-2) is only diacylated. Here the authors show that TLR6-deficient (TLR6-/-) cells are unresponsive to MALP-2 but retain their normal responses to lipopeptides of other bacterial origins. Reconstitution expts. in TLR2-/-TLR6-/- embryonic fibroblasts reveal that co-expression of TLR2 and TLR6 is absolutely required for MALP-2 responsiveness. Taken together, these results show that TLR6 recognizes MALP-2 cooperatively with TLR2, and appears to discriminate between the N-terminal lipoylated structures of MALP-2 and lipopeptides derived from other bacteria. 15-10 (Immunochemistry) bacteria lipoprotein Toll receptor 6 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (MALP-2 (macrophage-activating lipopeptide-2); Toll-like receptor-6 mediates recognition of) Transcription factors RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (NF-κB (nuclear factor κB); activation in Toll-like

receptor-6 signaling) Receptors RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (TLR-2 (Toll-like receptor-2); cooperation with TLR6 in recognition of diacylated lipopeptides) IT Receptors RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (TLR-6 (Toll-like receptor-6); in recognition of diacylated lipopeptides) IT Borrelia burgdorferi Salmonella minnesota Staphylococcus aureus Treponema pallidum (Toll-like receptor-6 mediates recognition of diacylated lipopeptides) ITLipopeptides RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (diacylated; Toll-like receptor-6 mediates recognition of) IT Signal transduction, biological (for Toll-like receptor-6 in recognition of diacylated lipopeptides) IT 289898-51-7, Jun N-terminal kinase 1 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (activation in Toll-like receptor-6 signaling) IT 289898-51-7, Jun N-terminal kinase 1 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

SOURCE:

PUBLISHER:

LANGUAGE:

AB

CC

ST IT

IT

DOCUMENT TYPE:

Lipopeptides

(activation in Toll-like receptor-6 signaling)

289898-51-7 HCAPLUS RN

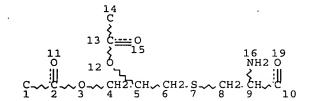
Kinase (phosphorylating), gene c-jun protein N-terminal, 1 (9CI) (CA CN INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SEARCH IN CAPLUS AND USPATFULL

=> d que stat 121 L11 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

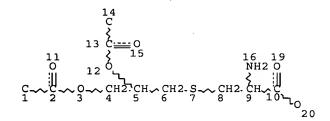
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L13 184 SE

184 SEA FILE=REGISTRY SSS FUL L11

L16 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

L17 7 SEA FILE=REGISTRY SUB=L13 SSS FUL L16

L18 10 SEA FILE=HCAPLUS ABB=ON L17

L19 5 SEA FILE=HCAPLUS ABB=ON L18 AND (PRD<20020719 OR PD<20020719)

L20 2 SEA FILE-USPATFULL ABB-ON L18 AND (PRD<20020719 OR PD<20020719

L21 6 DUP REMOV L19 L20 (1 DUPLICATE REMOVED)

=> d ibib abs hitstr 121 1-6

L21 ANSWER 1 OF 6 USPATFULL on STN

ACCESSION NUMBER: 2005:318074 USPATFULL Full-text

TITLE:

Use of a lipopeptide or lipoprotein as an adjuvant in

therapeutic or prophylactic vaccinations

INVENTOR(S):

Muhlradt, Peter, Braunschweig, GERMANY, FEDERAL

REPUBLIC OF

Guzman, Carlos Alberto, Wolfenbuttel/Deutschland,

GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	 2005276813	Al	20051215	
APPLICATION INFO.:	 2003-509917 2003-EP3497	A1	20030403	(10)

20041004 PCT 371 date

NUMBER DATE

PRIORITY INFORMATION:

EP 2002-7640 20020404

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

WHITHAM, CURTIS & CHRISTOFFERSON, P.C., 11491 SUNSET

HILLS ROAD, SUITE 340, RESTON, VA, 20190, US

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

11

NUMBER OF DRAWINGS:

12 Drawing Page(s)

LINE COUNT:

1105

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclose

Disclosed is the use of lipopeptides and lipoproteins as mucosal adjuvants for various vaccinations via mucous membranes, particularly intranasally. Said lipopeptides represent peptides or proteins substituted with 2,3-diacyloxy(2R)-propyl at the amino-terminal cystein of a peptide or protein, preferably S-(2,3-bispalmitoyloxy-(2R)- propyl)cysteinyl peptides derived from mycoplasmas. Said peptides are highly effective even in small doses, produce good immunization results, and increase the IgA level, among others.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 143405-67-8D, peptide conjugates

(vaccine comprising an antigen and lipopeptide or lipoprotein as mucosal adjuvant for stimulation of T-cells and Igs)

RN 143405-67-8 USPATFULL

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L21 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:818310 HCAPLUS Full-text

DOCUMENT NUMBER:

139:306533

TITLE:

Use of a lipopeptide or lipoprotein as an adjuvant in

therapeutic or prophylactic vaccinations Guzman, Carlos Alberto; Muehlradt, Peter

GBF Gesellschaft fuer Biotechnologische Forschung PATENT ASSIGNEE(S):

m.b.H., Germany

PCT Int. Appl., 47 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.	•		KIN)	DATE		1	APPL:	ICAT:	ION 1	, OV		D	ATE		
	2003						2003: 2003:		1	WO 20	003-1	EP34:	97		2	00304	103 <	- -
, WO	2003																	
	W:						AU,											
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IŢ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	ĠĂ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
CA	2480	196			A1		2003	1016	(CA 20	003-:	2480	196		2	00304	103 <	
AU	2003	2267	77		A1		2003	1020		AU 20	003-3	2267	77		2	00304	103 <	
EP	1490	106			A2		2004	1229]	EP 20	003-	74578	32		2	00304	103 <	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
US	2005	2768	13		Al		2005	1215	1	JS 20	004-	5099:	17		2	00410	004 <	
PRIORIT	PRIORITY APPLN. INFO.:]	EP 20	002-	7640		1	A 20	00204	104 <	
									ï	WO 20	003-1	EP34	97	1	W 2	00304	103	

- AB Disclosed is the use of lipopeptides and lipoproteins as mucosal adjuvants for various vaccinations via mucous membranes, particularly intranasally. Said lipopeptides represent peptides or proteins substituted with 2,3diacyloxy(2R)-Pr at the amino-terminal cysteine of a peptide or protein, preferably S-(2,3-bispalmitoyloxy-(2R)-propyl)cysteinyl peptides derived from mycoplasmas. Said peptides are highly effective even in small doses, produce good immunization results, and increase the IgA level, among others. The lipopeptides stimulate both Th1 and Th2 cells and IgG and IgA responses to an antigen.
- ΙT 143405-67-8D, peptide conjugates

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vaccine comprising an antigen and lipopeptide or lipoprotein as mucosal adjuvant for stimulation of T-cells and Igs)

- RN 143405-67-8 HCAPLUS
- Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-CN ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH}_2 \\ & \text{HO}_2\text{C} \\ & \text{R} \\ & \text{O} \\ & \text{(CH}_2)_{14} \\ & \text{Ne} \\ & \text{(CH}_2)_{14} \\ \end{array}$$

L21 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

1997:15525 HCAPLUS Full-text

DOCUMENT NUMBER:

126:73781

TITLE:

Multiple antiqenic peptide system having adjuvant

WO 1993-US4179

properties for use in vaccines

INVENTOR(S):

Tam, James P.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 24 pp., Cont. of U.S. Ser. No.

877,613, abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

A1

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

WO 9322343

PATENT NO. KIND DATE APPLICATION NO. DATE ---------US 5580563 Α . 19961203 US 1994-331489 19941228 <--

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE PRIORITY APPLN. INFO.: US 1992-877613 B2 19920501 <--

19931111

WO 1993-US4179 W 19930503 <--

19930503 <--

AB A multiple antigenic peptide system is disclosed that comprises a dendritic core and peptides and a lipophilic anchoring moiety. This peptide system is capable of eliciting an immune response when injected into a mammal; vaccines prepared from the system and methods of use including therapeutic protocols are included. This combination eliminates the need for the inclusion of adjuvants found to be toxic to humans, and facilitates the exponential amplification of the antigenic potential of a vaccine prepared therefrom, as noncovalent amplification by a liposome or micellar form is possible. Further, multiple different antigenic peptides may be attached so that the system may be prepared for administration to concurrently treat diverse ailments, e.g. AIDS and influenza. Thus, 4 copies of a 24-residue peptide (designated B1) of the V3 loop of HIV-1 gpl20 were linked to the free $N\alpha$ and Nε positions of Nα, Nε-dilysyl-Lys-Ser-Ser-[Nε-(tripalmitoyl-Sglycerylcysteinyl)]lysyl-alanine, and the product was incorporated into liposomes which were used to immunize mice. The immunized mice showed a hightiter humoral antibody response, a mitogenic response in spleen cells, a CD4+ T-helper cell response, a cytotoxic T-lymphocyte response, and formation of IL-2 by spleen cells after restimulation.

IT 155382-51-7DP, conjugates with peptides

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(multiple antigenic peptide system having adjuvant properties for use in vaccines)

RN 155382-51-7 HCAPLUS

CN Hexadecanoic acid, 1-[[(2-amino-2-carboxyethyl)thio]methyl]-1,2-ethanediyl

$$\begin{array}{c} & \text{NH2} \\ & \text{HO}_2\text{C}-\text{CH}-\text{CH}_2-\text{S}-\text{CH}_2 & \text{O} \\ & \text{Me}-\text{(CH2)}_{14}-\text{C}-\text{O}-\text{CH2}-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{(CH2)}_{14}-\text{Me} \end{array}$$

L21 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:455886 HCAPLUS Full-text

DOCUMENT NUMBER:

121:55886

TITLE:

Dendritic conjugates of lipids with multiple peptide

antigens for use as adjuvants and in vaccines

INVENTOR(S):

Tam, James P.

PATENT ASSIGNEE(S):

Rockefeller University, USA

SOURCE:

PCT Int. Appl., 55 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO).	KIND	DATE	APPLICATION NO.	DATE
WO 932234	:3	A1	19931111	WO 1993-US4179	19930503 <
W: (CA, JP, US				•
RW: A	AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
US 558056		Α	19961203	US 1994-331489	19941228 <
PRIORITY APPL	I. INFO.:			US 1992-877613	A2 19920501 <

WO 1993-US4179 AB A multiple antigenic peptide system with a dendritic core, multiple peptides and a lipophilic anchoring moiety is described. This combination eliminates the need for adjuvants found to be toxic to humans, and facilitates the exponential amplification of the antigenic potential of a vaccine prepared from it, as noncovalent amplification by a liposome or micellar form is possible. Multiple different antigenic peptides may be attached so that the system may be used to concurrently treat multiple diseases, e.g., AIDS and influenza. Humoral and T-cell epitopes may be present in the same conjugate. The present multiple antigen peptide system is capable of eliciting an immune response when injected into a mammal. Lysyl tripalmitoyl-S-glyceryl cysteine (Lys(P3C)) was conjugated with resin immobilized Fmoc-Ala and the tetrabranching peptide [Fmoc-Lys(Fmoc)]2-Lys-Ser-Ser-Lys(P3C)-Ala immobilized on resin and the B1 epitope of the V3 loop of gp120 of HIV-1 synthesized by Fmoc chemical using Arg(Pmc) and Asn(Trt). The conjugates were incorporated into egg lecithin/cholesterol/stearylamine liposomes and injected into mice and guinea pigs (100 µg protein on days 0 and 14 and 50 µg on days 30 and 45) and the antisera characterized. Antibody titers from animals immunized with the dendritic peptide were .apprx.2-fold higher than those from animals immunized with gp120 with 90% fusion inhibition titers of 4.3-10+103.

IT 155382-51-7

> RL: RCT (Reactant); RACT (Reactant or reagent) (reactions of, in preparation dendritic peptide conjugates for use as adjuvants and vaccines)

RN 155382-51-7 HCAPLUS

CN Hexadecanoic acid, 1-[[(2-amino-2-carboxyethyl)thio]methyl]-1,2-ethanediyl

$$\begin{array}{c} \text{NH2} \\ \text{HO}_2\text{C}-\text{CH}-\text{CH}_2-\text{S}-\text{CH}_2 & \text{O} \\ \text{Me}-\text{(CH2)}_{14}-\text{C}-\text{O}-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{(CH2)}_{14}-\text{Me} \\ \\ \parallel \\ \end{array}$$

L21 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:534761 HCAPLUS Full-text

DOCUMENT NUMBER:

121:134761

TITLE:

Synthesis and mitogenic activity of chiral lipopeptide

WS1279 and its derivatives

AUTHOR(S):

Kurimura, Muneaki; Ochiai, Akiko; Achiwa, Kazuo

CORPORATE SOURCE:

Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, 422, Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (1993),

41(11), 1965-70

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Optically active lipopeptide derivs. have been synthesized by the use of chiral glycerol derivs. Lipopeptide WS1279 derivs. with (R)-glycerol moieties showed a higher mitogenic activity than those with (S)-configuration. Various N-protected lipopeptide and N-deprotected derivs. showed increased mitogenic activity (no data).

IT 143405-85-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and acidic deblocking of)

RN 143405-85-0 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-3-(1,1-dimethylethoxy)-3-oxopropyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 143405-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 143405-67-8 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NH2} \\ \text{HO}_2\text{C} \\ \text{Me} \end{array} \begin{array}{c} \text{S} \\ \text{O} \\ \text{(CH2)} \\ \text{14} \end{array} \begin{array}{c} \text{Me} \\ \text{(CH2)} \\ \text{14} \end{array}$$

L21 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1992:551315 HCAPLUS Full-text

DOCUMENT NUMBER:

CORPORATE SOURCE:

117:151315

TITLE:

Stereospecific synthesis and mitogenic activity of

lipopeptide WS1279 and its derivatives

AUTHOR (S):

Kurimura, Muneaki; Ochiai, Akiko; Achiwa, Kazuo. Sch. Pharm. Sci., Univ. Shizuoka, Shizuoka, Japan

SOURCE:

Peptide Chemistry (1992), Volume Date 1991,

29th, 361-6

CODEN: PECHDP; ISSN: 0388-3698

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 117:151315

GI

AB The stereospecific synthesis of title lipopeptides I [R1 = palmitoyl, R2 = Asn-Ser-Gly-Gly-Ser-OH; R1 = H, Cl3CCH2O2C (Troc), R2 = Asn-Ser-Gly-Gly-Ser-OH, Asn-Ser-Gly-Gly-OH, Asn-Ser-OH, Asn-OH, OH] and II (R1 = palmitoyl, Troc, H) is described. Thus, cysteine derivative III (R3 = CMe3) was de-tert-butylated by CF3CO2H to give III (R3 = H), which was coupled with H-Asn-Ser(CMe3)-Gly-Ser(CMe3)-OCMe3 by DEPC in the presence of Et3N in DMF to give 78% lipopeptide IV (R4 = Troc). The latter was Troc-deblocked by Zn/HOAc to give 80% IV (R4 = H), which was acylated with palmitoyl chloride in the presence diisopropylethylamine and DMAP in CH2Cl2 to give 72% IV (R4 = palmitoyl), which was deblocked by CF3CO2H to give 75% I (R1 = palmitoyl, R2 = Asn-Ser-Gly-Gly-Ser-OH). The relationship between structure and mitogenic activity was discussed for the lipopeptides I.

IT 143405-85-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and deblocking of)

RN 143405-85-0 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-3-(1,1-dimethylethoxy)-3-oxopropyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 143405-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and mitogenic activity of)

RN 143405-67-8 HCAPLUS

CN Hexadecanoic acid, (1R)-1-[[[(2R)-2-amino-2-carboxyethyl]thio]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)